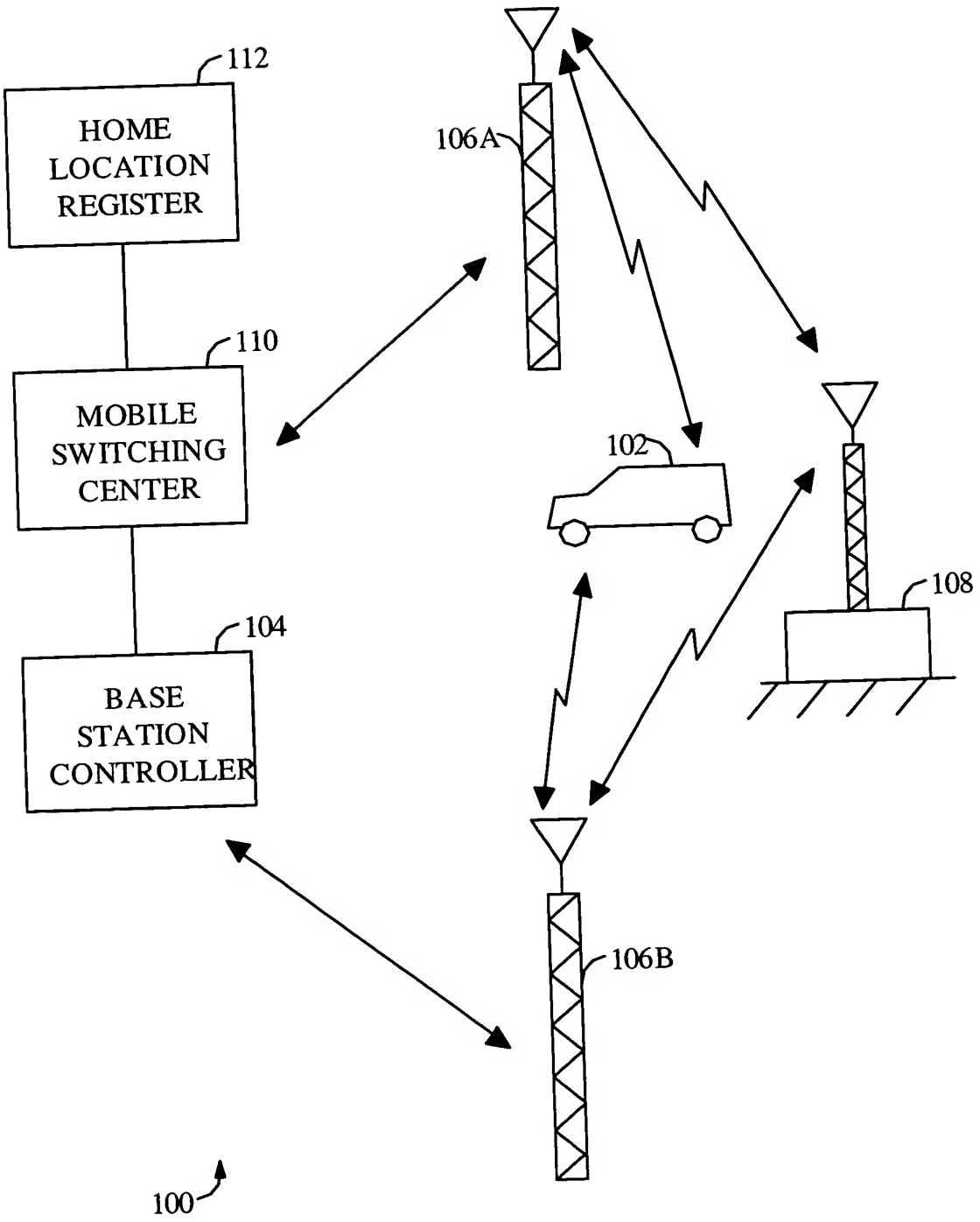

112
HOME LOCATION REGISTER
110
MOBILE SWITCHING CENTER
104
BASE STATION CONTROLLER
106A
102
108
106B
100

FIG. 1

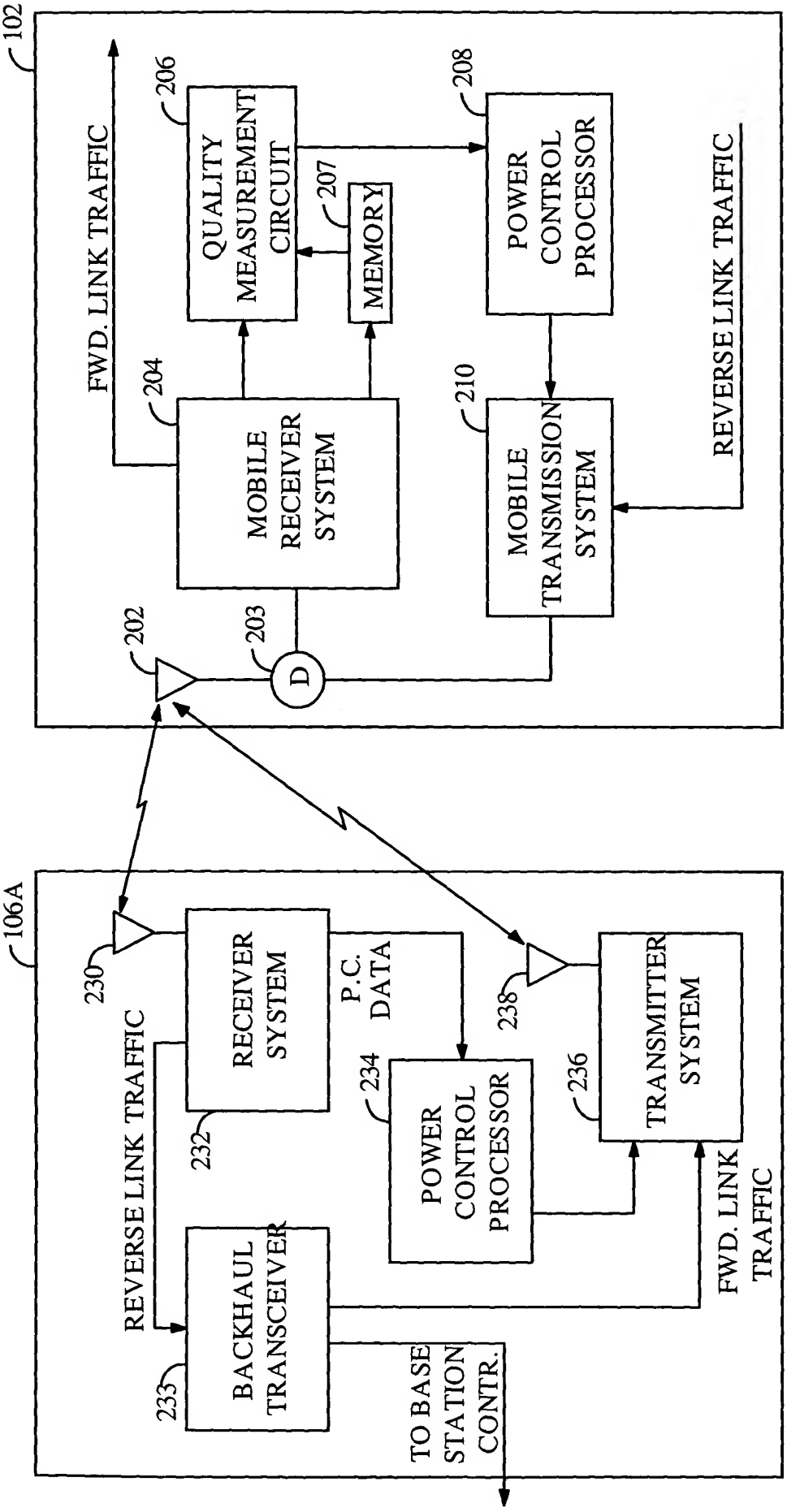
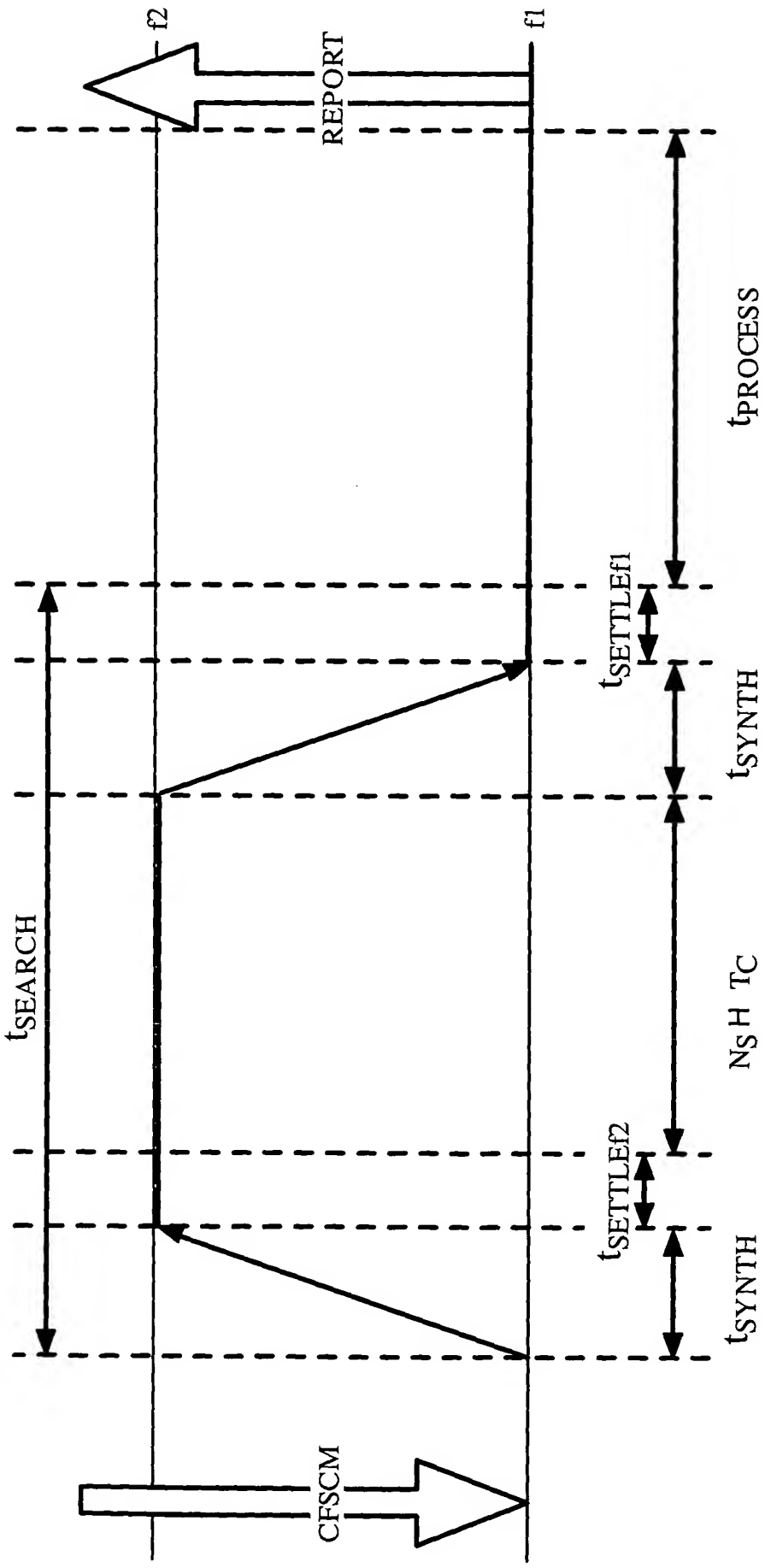

102
FWD. LINK TRAFFIC
206
QUALITY MEASUREMENT CIRCUIT
207
MEMORY
208
POWER CONTROL PROCESSOR
204
MOBILE RECEIVER SYSTEM
210
MOBILE TRANSMISSION SYSTEM
REVERSE LINK TRAFFIC
202
203
D
106A
230
RECEIVER SYSTEM
P.C. DATA
238
TRANSMITTER SYSTEM
REVERSE LINK TRAFFIC
232
234
POWER CONTROL PROCESSOR
236
FWD. LINK TRAFFIC
233
BACKHAUL TRANSCEIVER
TO BASE STATION CONTR.

FIG. 2



INTER-FREQUENCY SEARCH EXCURSION TIMING

FIG. 3

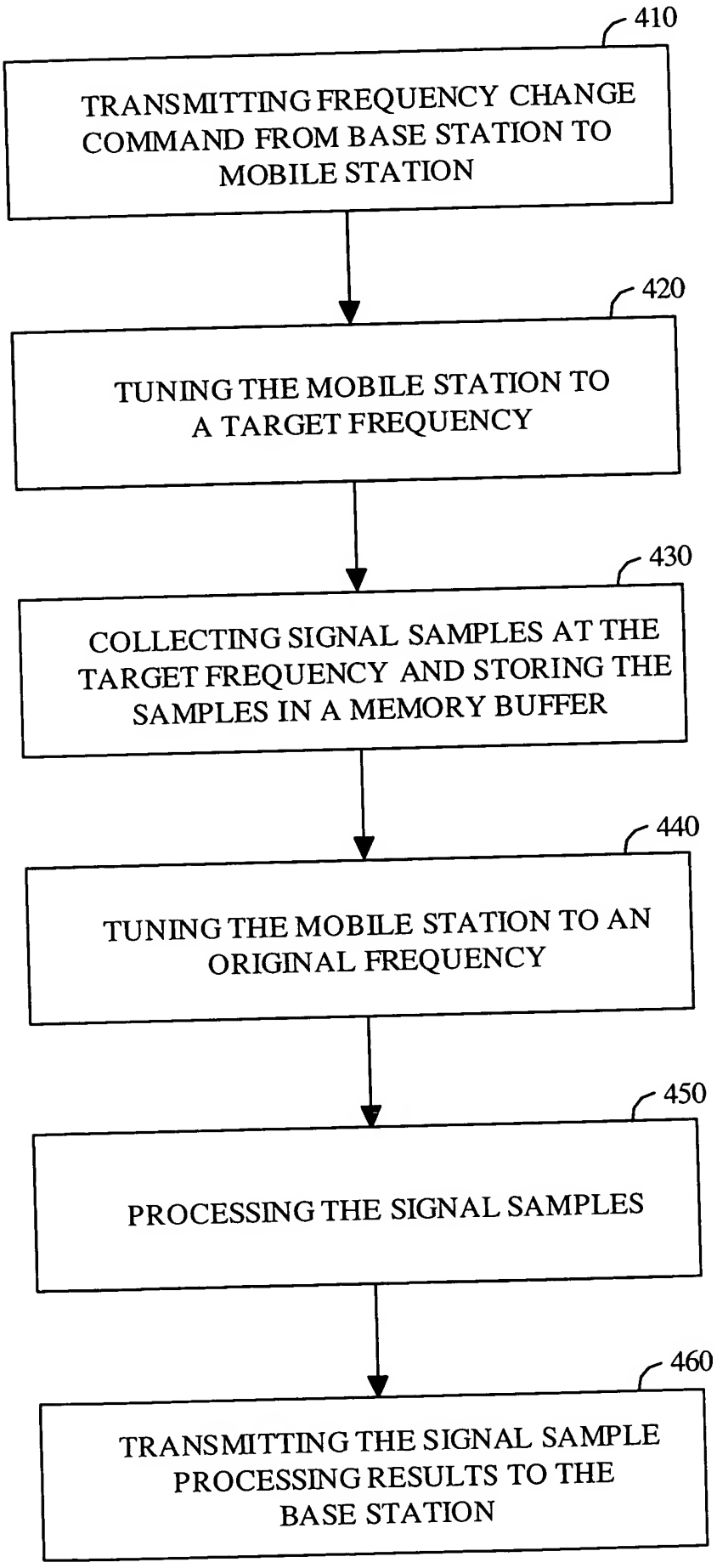
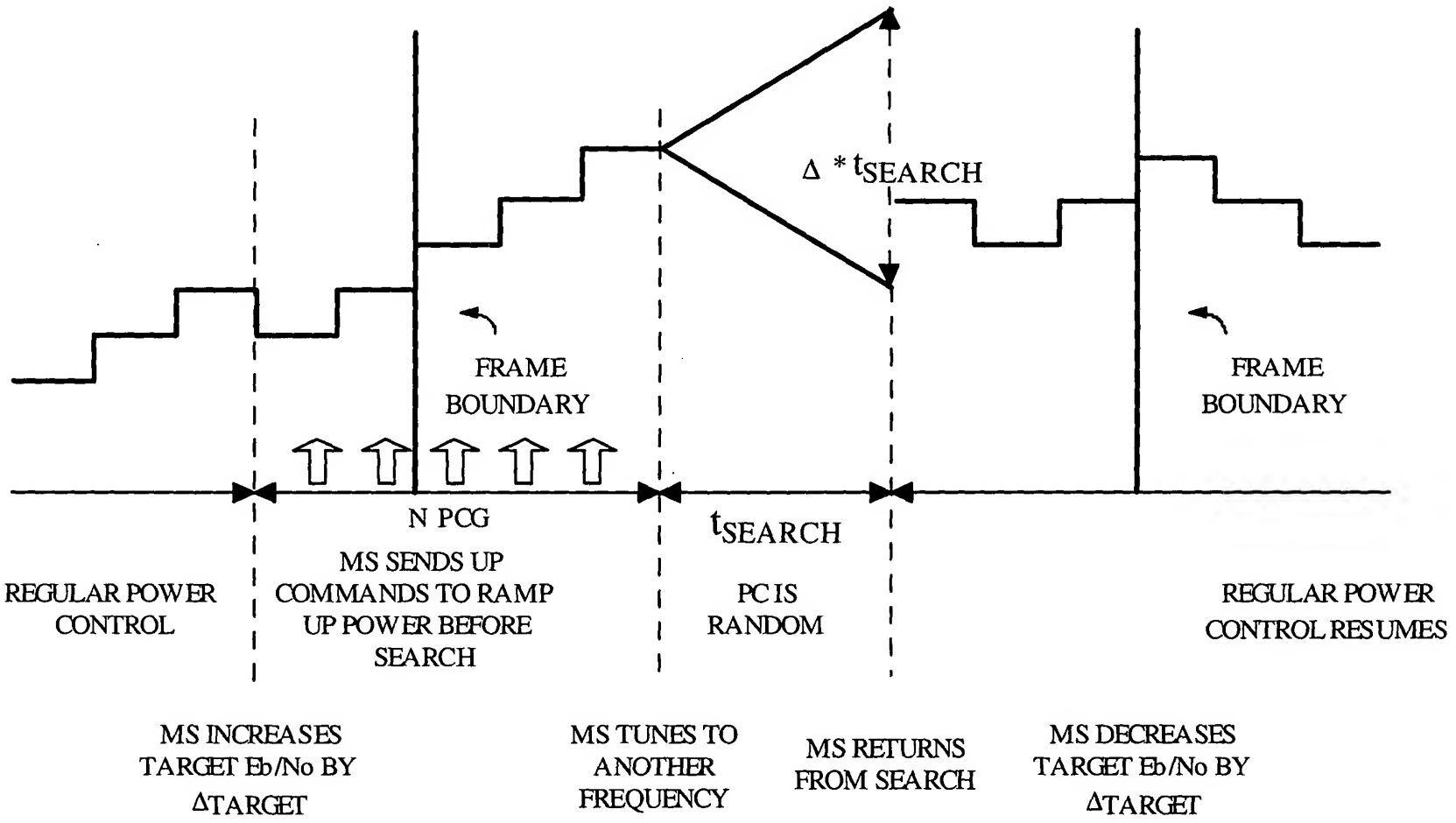

410
TRANSMITTING FREQUENCY CHANGE COMMAND FROM BASE STATION TO MOBILE STATION
420
TUNING THE MOBILE STATION TO A TARGET FREQUENCY
430
COLLECTING SIGNAL SAMPLES AT THE TARGET FREQUENCY AND STORING THE SAMPLES IN A MEMORY BUFFER
440
TUNING THE MOBILE STATION TO AN ORIGINAL FREQUENCY
450
PROCESSING THE SIGNAL SAMPLES
460
TRANSMITTING THE SIGNAL SAMPLE PROCESSING RESULTS TO THE BASE STATION

FIG. 4



FORWARD LINK POWER CONTROL INCREASE DURING SEARCH EXCURSION

FIG. 5

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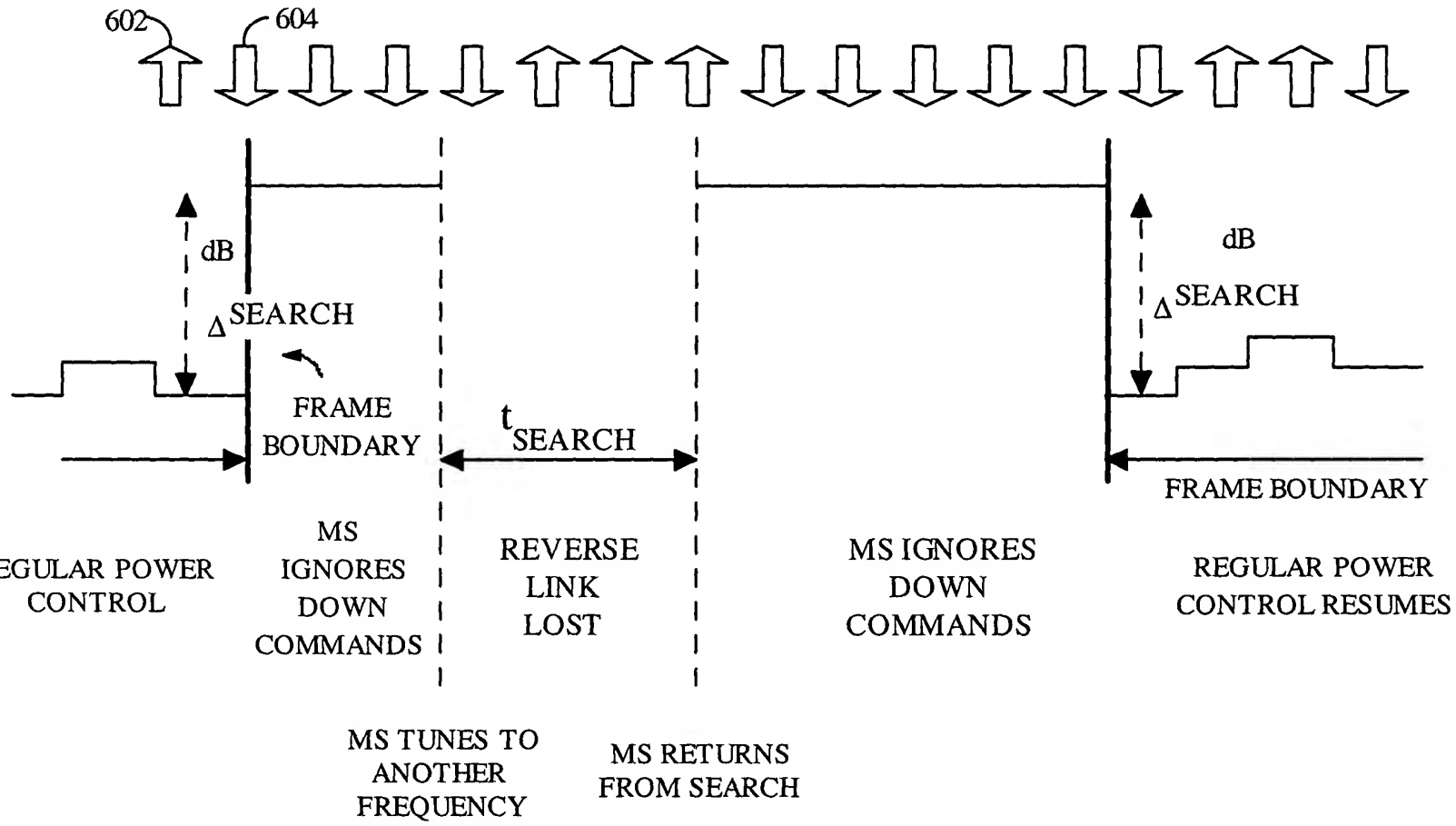

REVERSE LINK POWER INCREASE DURING SEARCH VISIT

FIG. 6

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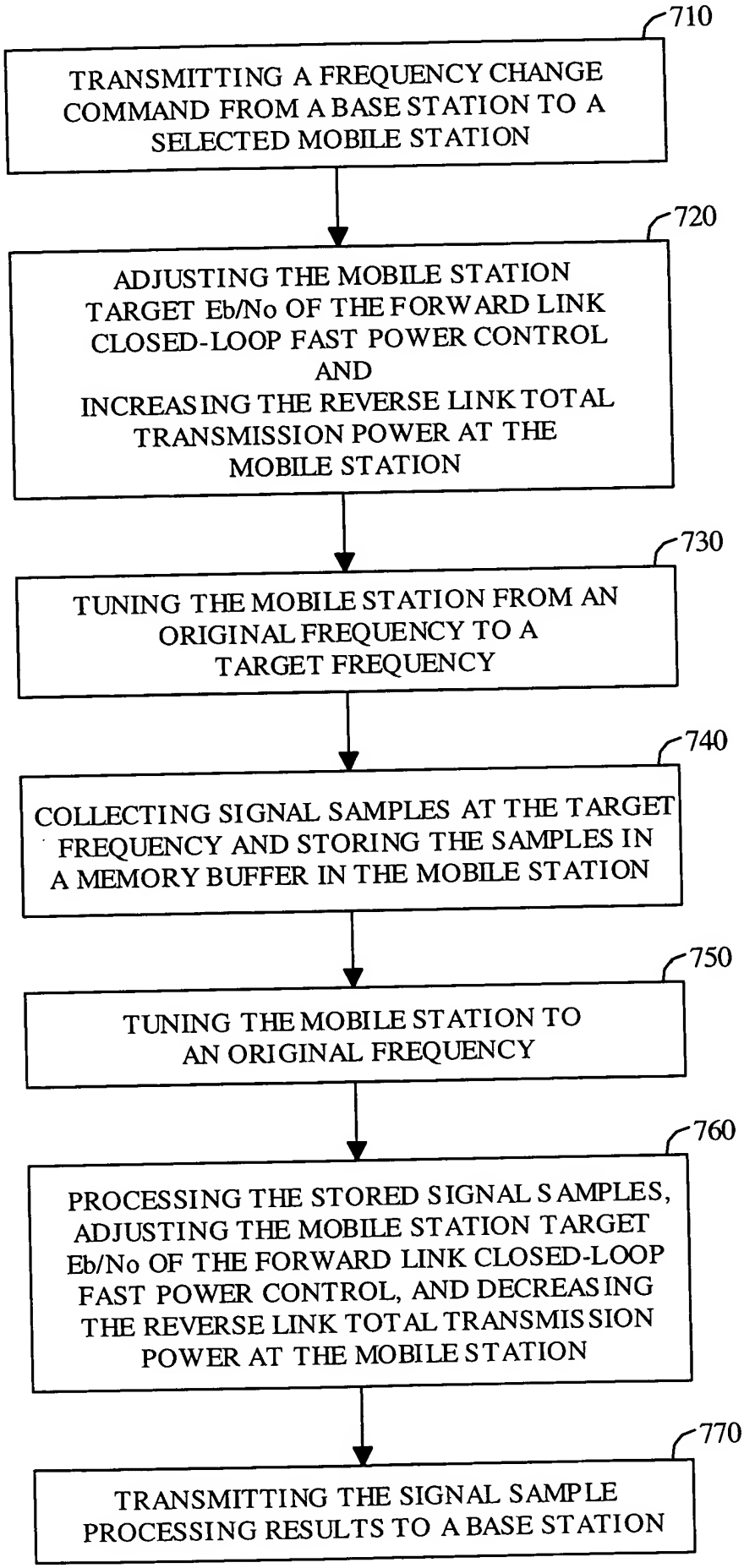
710
TRANSMITTING A FREQUENCY CHANGE COMMAND FROM A BASE STATION TO A SELECTED MOBILE STATION
720
ADJUSTING THE MOBILE STATION TARGET Eb/No OF THE FORWARD LINK CLOSED-LOOP FAST POWER CONTROL AND INCREASING THE REVERSE LINK TOTAL TRANSMISSION POWER AT THE MOBILE STATION
730
TUNING THE MOBILE STATION FROM AN ORIGINAL FREQUENCY TO A TARGET FREQUENCY
740
COLLECTING SIGNAL SAMPLES AT THE TARGET FREQUENCY AND STORING THE SAMPLES IN A MEMORY BUFFER IN THE MOBILE STATION
750
TUNING THE MOBILE STATION TO AN ORIGINAL FREQUENCY
760
PROCESSING THE STORED SIGNAL SAMPLES, ADJUSTING THE MOBILE STATION TARGET Eb/No OF THE FORWARD LINK CLOSED-LOOP FAST POWER CONTROL, AND DECREASING THE REVERSE LINK TOTAL TRANSMISSION POWER AT THE MOBILE STATION
770
TRANSMITTING THE SIGNAL SAMPLE PROCESSING RESULTS TO A BASE STATION

FIG. 7